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FILE 'HOME' ENTERED AT 23:12:15 ON 10 MAY 2007

=> index bioscience chemistry
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
FILE 'ENCOMPLIT2' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,
       AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,
       CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,
       DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 23:12:37 ON 10 MAY 2007

90 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s (phosvitin or yolk stor? (w) protein or vitellogenin) (S) (composition or
formulation or preparation or cream or cosmetic or lotion or emulsion or
suspension)
         52    FILE AGRICOLA
          3    FILE ANABSTR
          7    FILE AQUALINE
         99    FILE AQUASCI
         16    FILE BIOENG
        137    FILE BIOSIS
          7    FILE BIOTECHABS
          7    FILE BIOTECHDS
  12 FILES SEARCHED...
         55    FILE BIOTECHNO
        114    FILE CABA
        357    FILE CAPLUS
          1    FILE CEABA-VTB
          1    FILE CONFSCI
          1    FILE CROPB
          5    FILE CROPU
  21 FILES SEARCHED...
          1    FILE DDFU
         18    FILE DGENE
  23 FILES SEARCHED...
         24    FILE DISSABS
          1    FILE DRUGU
          3    FILE EMBAL
         38    FILE EMBASE
         86    FILE ESBIOBASE
         30    FILE FROSTI
  33 FILES SEARCHED...
         34    FILE FSTA
          8    FILE IFIPAT
         99    FILE LIFESCI
         59    FILE MEDLINE
          2    FILE NTIS
         35    FILE OCEAN
         60    FILE PASCAL
  47 FILES SEARCHED...
         65    FILE SCISEARCH
          6    FILE TOXCENTER
         36    FILE USPATFULL
          2    FILE USPAT2
  61 FILES SEARCHED...
          1    FILE VETU
          9    FILE WATER
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          9   FILE WPIDS
          9   FILE WPINDEX
  70 FILES SEARCHED...
         10   FILE BABS
          3   FILE CAOLD
          7   FILE COMPENDEX
          1   FILE INSPHYS
  81 FILES SEARCHED...

  42 FILES HAVE ONE OR MORE ANSWERS,   90 FILES SEARCHED IN STNINDEX

L1   QUE (PHOSVITIN OR YOLK STOR? (W) PROTEIN OR VITELLOGENIN) (S) (COMPOSITION
       OR FORMULATION OR PREPARATION OR CREAM OR COSMETIC OR LOTION OR EMULS
       ION OR SUSPENSION)

=> d rank
F1          357   CAPLUS
F2          137   BIOSIS
F3          114   CABA
F4           99   AQUASCI
F5           99   LIFESCI
F6           86   ESBIOBASE
F7           65   SCISEARCH
F8           60   PASCAL
F9           59   MEDLINE
F10          55   BIOTECHNO
F11          52   AGRICOLA
F12          38   EMBASE
F13          36   USPATFULL
F14          35   OCEAN
F15          34   FSTA
F16          30   FROSTI
F17          24   DISSABS
F18          18   DGENE
F19          16   BIOENG
F20          10   BABS
F21           9   WATER
F22           9   WPIDS
F23           9   WPINDEX
F24           8   IFIPAT
F25           7   AQUALINE
F26           7   BIOTECHABS
F27           7   BIOTECHDS
F28           7   COMPENDEX
F29           6   TOXCENTER
F30           5   CROPU
F31           3   ANABSTR
F32           3   EMBAL
F33           3   CAOLD
F34           2   NTIS
F35           2   USPAT2
F36           1   CEABA-VTB
F37           1   CONFSCI
F38           1   CROPB
F39           1   DDFU
F40           1   DRUGU
F41           1   VETU
F42           1   INSPHYS


=> file F1-17
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                               6.30       6.51
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=> s l1 and (cream or cosmetic or lotion or emulsion or suspension or coat? or ointment?)
L2 32 FILE CAPLUS
L3 12 FILE BIOSIS
L4 7 FILE CABA
L5 5 FILE AQUASCI
L6 6 FILE LIFESCI

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L7            6 FILE ESBIOBASE
L8           10 FILE SCISEARCH
L9           15 FILE PASCAL
L10           1 FILE MEDLINE
L11           2 FILE BIOTECHNO
L12           9 FILE AGRICOLA
L13           0 FILE EMBASE
L14          32 FILE USPATFULL
L15           3 FILE OCEAN
L16          19 FILE FSTA
L17          14 FILE FROSTI
L18           5 FILE DISSABS

TOTAL FOR ALL FILES
L19         178 L1 AND (CREAM OR COSMETIC OR LOTION OR EMULSION OR SUSPENSION
                OR COAT? OR OINTMENT?)

=> dup rem l19
PROCESSING COMPLETED FOR L19
L20          93 DUP REM L19 (85 DUPLICATES REMOVED)

=> d l20 40-93 ibib abs

L20  ANSWER 40 OF 93  USPATFULL on STN
ACCESSION NUMBER:         1999:113731  USPATFULL
TITLE:                    Method of inhibiting abnormal tau hyper phosphorylation
                          in a cell
INVENTOR(S):              Ingram, Vernon M., Cambridge, MA, United States
                          Roder, Hanno M., Wupportal II, Germany, Federal
                          Republic of
PATENT ASSIGNEE(S):       Massachusetts Institute of Technology, Cambridge, MA,
                          United States (U.S. corporation)

                               NUMBER        KIND    DATE
                          ---------------- ------ --------
PATENT INFORMATION:       US 5955444               19990921
APPLICATION INFO.:        US 1995-480793           19950607  (8)
RELATED APPLN. INFO.:     Division of Ser. No. US 1992-912293, filed on 10 Jul
                          1992, now abandoned which is a continuation-in-part of
                          Ser. No. US 1991-742880, filed on 9 Aug 1991, now
                          abandoned
DOCUMENT TYPE:            Utility
FILE SEGMENT:             Granted
PRIMARY EXAMINER:         Hutzell, Paula K.
ASSISTANT EXAMINER:       Duffy, Patricia A.
LEGAL REPRESENTATIVE:     Wolf, Greenfield & Sacks, P.c.
NUMBER OF CLAIMS:         3
EXEMPLARY CLAIM:          1
NUMBER OF DRAWINGS:       1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT:               1598
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      Novel TAU/neurofilament protein kinases, PK40 and PK36, are essentially
        purified and characterized. Novel immunoassays relating to the kinases
        and inhibitors for the kinases also are provided. Finally, DNA sequences
        encoding the kinases and cell lines relating to the kinases are
        provided. Methods of inhibiting abnormal tau HYPER PHOSPHORYLATION
        activity in a cell by contacting a cell with an inhibitor that binds to
        an ATP binding site of PK40, in an amount sufficient to inhibit said
        phosphorylating activity which is characteristic of abnormal tau
        HYPERPHOSPHORYLATION in Alzheimer's Disease is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20  ANSWER 41 OF 93  USPATFULL on STN
```

ACCESSION NUMBER: 1999:22083 USPATFULL
TITLE: Method for isolation of bovine low-molecular weight CR-binding substance and method of use of the same
INVENTOR(S): Vincent, John B., Tuscaloosa, AL, United States
Davis, C. Michele, Tuscaloosa, AL, United States
PATENT ASSIGNEE(S): The University of Alabama, Tuscaloosa, AL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5872102		19990216
APPLICATION INFO.:	US 1996-729591		19961011 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Tsang, Cecilia J.
LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt. P.C.
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 601
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A fully chromium loaded bovine low-molecular weight chromium-binding protein is isolated by a process that combines homogenization with supplementation of chromium content. Following homogenization with water, the homogenate is fractionated with ethanol, and the fractions obtained are subjected to serial chromatography (ion-exchange followed by size-exclusion chromatography) to obtain the biologically pure bovine LMWCr. This biologically pure material elutes from an HPLC column as essentially a single band, giving a high degree of purity. The LMWCr is useful as a dietary supplement, and for the treatment or prevention of a variety of chromium-related disease conditions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 42 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 10
ACCESSION NUMBER: 1999:290254 CAPLUS
DOCUMENT NUMBER: 131:87049
TITLE: Molecular Mechanism of the Excellent Emulsifying Properties of Phosvitin-Galactomannan Conjugate
AUTHOR(S): Khan, M. A. Sattar; Babiker, El fadil E.; Azakami, Hiroyuki; Kato, Akio
CORPORATE SOURCE: Department of Biological Chemistry, Yamaguchi University, Yamaguchi, 753, Japan
SOURCE: Journal of Agricultural and Food Chemistry (1999), 47(6), 2262-2266
CODEN: JAFCAU; ISSN: 0021-8561
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The emulsifying properties of native and N- and C-terminal-deleted phosvitin (protease digests) were compared after conjugation with galactomannan. The emulsifying properties of Maillard-type phosvitin-galactomannan conjugates were greatly improved, whereas those of the protease-digested phosvitin-galactomannan conjugates were not so dramatically improved. Phosvitin was highly glycosylated with galactomannan, whereas the protease-digested phosvitin conjugate consisting of a highly phosphorylated core peptide fragment was not. The results suggest that both N and C termini of the peptide moiety, digested by protease, were essential for the improvement of emulsifying properties of phosvitin-galactomannan conjugates. In addition, the role of N and C termini as anchors in oil droplets was supported from the comparative studies of native phosvitin, phosvitin-galactomannan conjugates, and protease-digested phosvitin-galactomannan conjugates.
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 43 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 11
ACCESSION NUMBER: 1998:703901 CAPLUS
DOCUMENT NUMBER: 130:51501
TITLE: Effect of Protease Digestion and Dephosphorylation on High Emulsifying Properties of Hen Egg Yolk Phosvitin
AUTHOR(S): Khan, M. A. Sattar; Babiker, Elfadil E.; Azakami, Hiroyuki; Kato, Akio
CORPORATE SOURCE: Department of Biological Chemistry, Yamaguchi University, Yamaguchi, 753, Japan
SOURCE: Journal of Agricultural and Food Chemistry (1998), 46(12), 4977-4981
CODEN: JAFCAU; ISSN: 0021-8561
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The emulsifying properties, particularly the emulsion stability, of phosvitin was found to be higher than those of other food proteins. The emulsifying activity and emulsion stability were greatly decreased by protease and phosphatase treatment. The protease digestion of phosvitin resulted in the peptide cleavage of large fragment (a highly phosphorylated core region, 50 to 210 peptide) and small fragments (N-terminal 1 to 49 and C-terminal 211 to 217 peptides). The large fragment lacking the small fragments did not show the excellent emulsifying properties, suggesting that small fragments of protein moiety play an important role in emulsifying properties. On the other hand, the effect of phosphatase treatment showed that electrostatic repulsive force of phosphate in phosvitin has a significant affect on its emulsifying properties and that the protein moiety with abundant phosphorylated residues is also considered to be essential for the high emulsifying properties.
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 44 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 12
ACCESSION NUMBER: 1998:580846 CAPLUS
DOCUMENT NUMBER: 129:301813
TITLE: Antioxidant Activity of a Maillard-Type Phosvitin-Galactomannan Conjugate with Emulsifying Properties and Heat Stability
AUTHOR(S): Nakamura, Soichiro; Ogawa, Masahiro; Nakai, Shuryo; Kato, Akio; Kitts, David D.
CORPORATE SOURCE: Department of Food Science, University of British Columbia, Vancouver, BC, V6T 1Z4, Can.
SOURCE: Journal of Agricultural and Food Chemistry (1998), 46(10), 3958-3963
CODEN: JAFCAU; ISSN: 0021-8561
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Egg yolk phosvitin was conjugated with galactomannan through a controlled Maillard reaction at 60° in 79% relative humidity for 1 wk. Antioxidant activities of phosvitin and phosvitin-galactomannan conjugate (PGC) were assessed using a powdered model linoleic acid system. The conjugation reaction significantly ($P < 0.05$) enhanced the antioxidant activity of phosvitin. One-tenth percent PGC suppressed the relative lipid oxidation rate catalyzed by 1 mg/L Fe^{2+} to 75% and 73% in thiobarbituric acid and peroxide values, resp., compared to those of a simple phosvitin-galactomannan mixture after 3 days at 20°. The antioxidant effect of PGC was not affected by autoclaving (121°, 1.2 atm for 15 min), whereas the same treatment when applied to native phosvitin resulted in a lower affinity to inhibit iron-catalyzed lipid oxidation The conjugation of phosvitin with galactomannan

significantly (P < 0.05) improved both emulsifying activity and emulsion stability. The results demonstrate that the Maillard-type PGC can be used as an effective macromol. antioxidant, with good emulsifying properties and heat stability.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 45 OF 93 FROSTI COPYRIGHT 2007 LFRA on STN
ACCESSION NUMBER: 486913 FROSTI
TITLE: Emulsifying characterization of hens egg yolk proteins in oil-in-water emulsions.
AUTHOR: Mine Y.
SOURCE: Food Hydrocolloids, 1998, (October), 12 (4), 409-415 (29 ref.)
ISSN: 0268-005X
DOCUMENT TYPE: Journal
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Hens' egg yolk is an important emulsifying ingredient in food products such as mayonnaise, salad dressings and cakes. However, there are few studies on the interaction of yolk components on adsorption behaviour at the emulsion interface. The emulsifying properties of egg yolk were therefore studied as a function of pH and oil volume. The adsorption behaviour of high-density lipoprotein (HDL), low-density lipoprotein (LDL), phosvitin and livetin as a mixture in egg yolk was also examined in oil-in-water emulsions. Egg-yolk proteins formed larger emulsion particles at pH 3, and the mean droplet size of the emulsions decreased with increasing pH. The principal components to adsorb at the interface were granular lipovitellins. The results indicate that granules are the main contributor for egg-yolk emulsion and can affect the emulsifying properties at different pH values.

L20 ANSWER 46 OF 93 FSTA COPYRIGHT 2007 IFIS on STN
ACCESSION NUMBER: 1999(02):Q0018 FSTA
TITLE: Characterization of oil-in-water emulsions stabilized by hen's egg yolk granule.
AUTHOR: Aluko, R. E.; Mine, Y.
CORPORATE SOURCE: Correspondence (Reprint) address, Y. Mine, Dep. of Food Sci., Univ. of Guelph, Guelph, Ont. N1G 2W1, Canada. Tel. 519-824-4120 ext. 2901. Fax 519-824-6631. E-mail ymine(a)uoguelph.ca
SOURCE: Food Hydrocolloids, (1998) 12 (2) 203-210, 29 ref.
ISSN: 0268-005X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Emulsifying properties of egg yolk granules were determined, in the presence of NaCl and at pH 4-9, in oil-in-water emulsions containing pure triolein and granules in various buffers. Protein and phospholipid composition of the interfacial film were also measured, as was affinity of proteins for the interface. To prepare granules, liquid egg yolks were diluted in NaCl solution, mixed and centrifuged; precipitate was washed twice, centrifuged and the final precipitate was dispersed in NaCl solution containing sodium azide. Increases in particle size of emulsions were dependent on protein concentration in emulsion, up to 0.5%, at pH 7 and 9, whereas at pH 4, particle size increased with protein concentration, with no upper limit.

Phosvitin levels were lower in polypeptides remaining in washed emulsions than in granule preparations. At pH 4, binding of phosphatidylcholine at the interface increased with protein concentration up to 1%; at pH 7 and 9, maximum binding was observed at lower protein concentration

L20 ANSWER 47 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:16446 CAPLUS
DOCUMENT NUMBER: 128:21998
TITLE: Adsorption Behavior of Egg Yolk Low-Density Lipoproteins in Oil-in-Water Emulsions
AUTHOR(S): Mine, Yoshinori; Koseki, Taihei
CORPORATE SOURCE: Department of Food Science, University of Guelph, Guelph, ON, N1G 2W1, Can.
SOURCE: Journal of Agricultural and Food Chemistry (1998), 46(1), 36-41
CODEN: JAFCAU; ISSN: 0021-8561
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Adsorption behavior of egg yolk low-d. lipoprotein (LDL) constituents in oil-in-water emulsions (20% triolein) was examined The mean particle size was decreased with increase in LDL concns. and reached a plateau at 60 mg/mL of LDL concns. The average particle size and concentration of lipoproteins at the interface were greater for emulsions made at pH 3.0 and 5.0 than at pH 7.0 and 9.0, resulting from the formation of lipoprotein dimers at acid pHs. Electrophoretic anal. revealed that the three polypeptides (64, 43, and 19 kDa) in LDL constituents did not adsorb at the interface, independent of the LDL concentration, pHs, and NaCl content. On the other hand, cholesterol in LDL was preferentially adsorbed to the interfaces at the low LDL concentration The ratio of phosphatidylcholine and phosphatidylethanolamine was increased with increased of LDL concentration These results suggest that egg yolk LDL micelles breakdown when the micelles come into contact with the interface and rearrangement of lipoproteins, cholesterol, and phospholipids take place following adsorption at an O/W interface.
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 48 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:636873 CAPLUS
DOCUMENT NUMBER: 127:230341
TITLE: Preparation of transgenic birds by gene transfer with p95-specific gene techniques
INVENTOR(S): Schneider, Wolfgang Johann; Nimpf, Johannes
PATENT ASSIGNEE(S): Progen Biotechnik Gmbh, Germany
SOURCE: Ger. Offen., 8 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19607367	A1	19970828	DE 1996-19607367	19960227
PRIORITY APPLN. INFO.:			DE 1996-19607367	19960227

AB Conjugates of receptor p95 of egg and plasmid DNA are used to transform chicken egg cells and to create transgenic chickens. Thus, poly-L-lysine was conjugated to VLDL, vitellogenin or riboflavin-binding protein using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide. COS cells expressing chicken p95 receptor were successfully transfected with protein-polylysine conjugate-plasmid DNA complex. Transgenic chickens were produced from eggs lain by hens injected with such complexes.

L20 ANSWER 49 OF 93 USPATFULL on STN
ACCESSION NUMBER: 97:81412 USPATFULL

TITLE: Chromatographic agent and its use for the separation or proteins, polypeptides of metals
INVENTOR(S): Ramadoss, Candadai Seshadri, Bangalore, India
Lakhey, Hiten Vasant, Bangalore, India
Krishnaswamy, Patnam Rajagopaliengar, Bangalore, India
PATENT ASSIGNEE(S): Vittal Mallya Scientific Research Foundation, Bangalore, India (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5665868		19970909	
APPLICATION INFO.:	US 1991-759030		19910913	(7)

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1990-20098	19900914
	CA 1991-2044717	19910617

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Housel, James C.
ASSISTANT EXAMINER: Freed, Rachel
LEGAL REPRESENTATIVE: Pennie & Edmonds
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 761
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Phosvitin or a modified phosvitin immobilised and coupled to a suitable matrix may be used for the separation and purification of proteins or polypeptides and in the removal of metal ions from biological material. If desired the phosvitin or modified phosvitin may be in the form of a metal chelate complex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 50 OF 93 USPATFULL on STN
ACCESSION NUMBER: 97:70880 USPATFULL
TITLE: Monoclonal antibody to vitellin of the corn earworm, Helicoverpa zea
INVENTOR(S): Greenstone, Matthew H., Columbia, MO, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Secretary of Agriculture, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5656437		19970812	
APPLICATION INFO.:	US 1995-499803		19950707	(8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Housel, James C.
ASSISTANT EXAMINER: Portner, Ginny Allen
LEGAL REPRESENTATIVE: Silverstein, M. Howard, Deck, Randall E., Fado, John D.
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
LINE COUNT: 610
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A hybridoma cell line is described which produces and secretes a monoclonal antibody which specifically binds to vitellin in the eggs of the corn earworm, Helicoverpa zea, but does not bind to vitellin in the eggs of the tobacco budworm, Heliothis virescens. Eggs of H. zea may be detected and differentiated from eggs of H. virescens by subjecting a sample of insect eggs to an immunosorbent assay using the above-mentioned monoclonal antibody. The monoclonal antibodies may also be incorporated into kits for the detection of eggs of H. zea in the

field.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 51 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 13
ACCESSION NUMBER: 1997:740693 CAPLUS
DOCUMENT NUMBER: 128:3093
TITLE: Competitive Adsorption of Hen's Egg Yolk Granule Lipoproteins and Phosvitin in Oil-in-Water Emulsions
AUTHOR(S): Aluko, Rotimi E.; Mine, Yoshinori
CORPORATE SOURCE: Department of Food Science, University of Guelph, Guelph, ON, N1G 2W1, Can.
SOURCE: Journal of Agricultural and Food Chemistry (1997), 45(12), 4564-4570
CODEN: JAFCAU; ISSN: 0021-8561
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Competitive adsorption of egg yolk granule lipoproteins and phosvitin in oil-in-water emulsions was investigated at pH 4.0, 7.0, and 9.0. Protein solns. contained different ratios of granule proteins to pure phosvitin. The droplet size of the pH 4.0 emulsions was higher than the values obtained for the pH 7.0 and 9.0 emulsions at all of the different combinations of granule and pure phosvitin. Unlike the pH 7.0 and 9.0 emulsions , the amount of phosvitin bound to the oil-water interface at pH 4.0 increased with increase in weight ratio of added pure phosvitin . Time-dependent exchange expts. showed that displacement of phosvitin from the interface by granule lipoproteins was higher and more rapid at pH 7.0 than at pH 4.0, suggesting that the reduction in neg. charges of phosvitin mols. at pH 4.0 increases its affinity to the interface. There was an initial increase in droplet size of the phosvitin emulsions upon addition of a granule prepn., which was probably as a result of bridging flocculation of the emulsions by the adsorbing lipoproteins. The results suggest that granule lipoproteins are more surface active than phosvitin and that protein mixts. containing lipoproteins and pure phosvitin would stabilize food emulsions better at pH 7.0 and 9.0 than at pH 4.0.
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 52 OF 93 AQUASCI COPYRIGHT 2007 FAO (On behalf of the ASFA Advisory Board). All rights reserved. on STN DUPLICATE 14
ACCESSION NUMBER: 97:36279 AQUASCI
DOCUMENT NUMBER: ASFA3 1997 27-06913
TITLE: Abnormalities in the reproductive health of flounder Platichthys flesus exposed to effluent from a sewage treatment works
AUTHOR: Lye, C.M.; Frid, C.L.J.; Gill, M.E.; McCormick, D.
CORPORATE SOURCE: Dove Mar. Lab., Univ. Newcastle upon Tyne, Cullercoats, North Shields NE30 4PZ, UK
SOURCE: MAR. POLLUT. BULL., (1997) vol. 34, no. 1, pp. 34-41. ISSN: 0025-326X.
DOCUMENT TYPE: Journal
FILE SEGMENT: ASFA3
LANGUAGE: English
SUMMARY LANGUAGE: English
AB A large number of substances in daily use are now known to mimic the female sex hormone oestrogen. These include DDT, some PCBs, components of food packaging materials and certain alkylphenolic substances which may arise from alkylphenol polyethoxylates used in detergents, paints and cosmetics. Indicators of reproductive health including gonad

morphology, hepatosomatic index (HSI) and serum levels of the egg protein vitellogenin (VTG) were determined for wild populations of the flounder, Platichthys flesus. Fish were obtained from three sites in northern England; the Solway Firth which receives only low levels of sewage effluent and two sites in the Tyne Estuary which receives effluent from a major sewage treatment works and a number of industrial discharges. Four lines of evidence suggest that the reproductive health of flounder is being influenced by exposure to oestrogenic substances. 1. Male fish with serum containing VTG, a reliable bio-indicator of oestrogen exposure, were recorded from all the sites studied. Frequency of occurrence was lowest (20%) in the Solway population and reached 60% at one of the sites in the Tyne. 2. Serum concentrations of VTG were also highest in fish from the Tyne stations. 3. Male fish from the Tyne also displayed high levels of testicular abnormalities (up to 53% of fish) compared to the Solway population (no abnormalities recorded) and 4. the HSI of male flounder from the Tyne were significantly greater than for males from the Solway site. This study is the first to demonstrate oestrogenic effects on a wild population of a marine fish exposed to sewage effluent. The high levels of abnormalities recorded raises concerns about the long term health of fish populations in areas receiving large volumes of effluent, these are discussed.

L20 ANSWER 53 OF 93 CABA COPYRIGHT 2007 CABI on STN
ACCESSION NUMBER: 97:50166 CABA
DOCUMENT NUMBER: 19971102501
TITLE: Abnormalities in the reproductive health of flounder Platichthys flesus exposed to effluent from a sewage treatment works
AUTHOR: Lye, C. M.; Frid, C. L. J.; Gill, M. E.; McCormick, D.
CORPORATE SOURCE: Dove Marine Laboratory, University of Newcastle upon Tyne, Cullercoats, North Shields NE30 4PZ, UK.
SOURCE: Marine Pollution Bulletin, (1997) Vol. 33, No. 1, pp. 34-41. 3 pp. of ref.
ISSN: 0025-326X
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 19 May 1997
Last Updated on STN: 19 May 1997

AB A large number of substances in daily use are now known to mimic the female sex hormone oestrogen. These include DDT, some PCBs, components of food packaging materials and certain alkylphenolic substances which may arise from alkylphenol polyethoxylates used in detergents, paints and cosmetics. Studies to determine the reproductive health, including gonad morphology, hepatosomatic index and serum levels of the egg protein vitellogenin of wild populations of the flounder, Platichthys flesus, obtained from locations in the UK (the Solway Firth which receives only low levels of sewage effluent, and 2 sites in the Tyne Estuary which receive effluent from a major sewage treatment works and a number of industrial discharges), are described.

L20 ANSWER 54 OF 93 DISSABS COPYRIGHT (C) 2007 ProQuest Information and Learning Company; All Rights Reserved on STN
ACCESSION NUMBER: 97:4248 DISSABS Order Number: AAR9639079
TITLE: INTERFACIAL PROPERTIES OF EMULSION STABILIZERS
AUTHOR: SAHIN, NEFISE OZLEN [PH.D.]; BURGESS, DIANE J. [advisor]
CORPORATE SOURCE: UNIVERSITY OF ILLINOIS AT CHICAGO, HEALTH SCIENCES CENTER (0806)
SOURCE: Dissertation Abstracts International, (1996) Vol. 57, No. 7B, p. 4412. Order No.: AAR9639079. 292 pages.
DOCUMENT TYPE: Dissertation
FILE SEGMENT: DAI
LANGUAGE: English
ENTRY DATE: Entered STN: 19970102

Last Updated on STN: 19970102

AB The purpose of this study was to investigate interfacial properties of emulsifiers and to evaluate relationship between interfacial properties of and emulsion stability.

Various emulsion stabilizers (bovine serum albumin, human immunoglobulin G, β-casein, egg yolk, phosvitin, and yolk components) were studied. Surface active egg components were isolated and purified prior to measurement using ultracentrifugation, dialysis, and exclusion chromatography. Interfacial tension, rheology, and charge were investigated using a Wilhelmy plate method, a surface oscillatory technique, and microelectrophores is respectively. Factors which affect the configuration charge of the molecules were investigated: pH (3-10); ioninc strength (1 to 1000 mM); concentration (0.0001 to 9% w/v); temperature (25 to 60$\sp\circ$C); and the addition of chemical agents (small surfactant molecules, NaCl, EDTA, GuHCl, urea, copper sulfate, phospholipids, acacia, dextran sulfate, α-casein, calcium chloride, and sucrose) at air/aqueous and oil/aqueous interfaces.

Emulsions were prepared by ultrasonication. Emulsifiers were selected based on the interfacial characterization data. Emulsion stability was determined with respect to centrifugal and temperature stress and to droplet size growth upon aging. The charge carried by emulsion droplets was determined using a Zeta Plus.

The addition of emulsion stabilizers to emulsions can reduce interfacial tension and create an interfacial mechanical barrier, both of which improve emulsion stability. The interfacial activity of emulsifiers was measured by monitoring the kinetics of decrease in interfacial tension. Emulsifiers formed rigid interfacial complexes. This strong mechanical barrier prevented coalescence of emulsion droplets. The interfacial rheological studies provided information on interfacial film rigidity. It was predicted that the conditions which increase interfacial rheology and/or decrease interfacial tension and/or increase interfacial charge would improve emulsion stability. Emulsion stability was shown to follow these predictions. However, it was shown that all three interfacial properties are very important. At pH values away from pI, the interfacial film strength and the interfacial charge are greater. Both of these factors contribute to emulsion stability. This indicates a positive correlation between interfacial properties and emulsion stability.

L20 ANSWER 55 OF 93 USPATFULL on STN

ACCESSION NUMBER:	96:94493 USPATFULL
TITLE:	DNA sequences to target proteins to the mammary gland for efficient secretion
INVENTOR(S):	Rosen, Jeffrey M., Houston, TX, United States
PATENT ASSIGNEE(S):	Pharming B.V., Leiden, Netherlands (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5565362		19961015
APPLICATION INFO.:	US 1994-185574		19940124 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1990-602066, filed on 24 Oct 1990, now patented, Pat. No. US 5304489 which is a continuation of Ser. No. US 1987-14952, filed on 17 Feb 1987, now abandoned

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Chambers, Jasemine C.
LEGAL REPRESENTATIVE:	Townsend and Townsend and Crew LLP
NUMBER OF CLAIMS:	18
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT:	1063

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Described is a method of targeting specific genes to the mammary gland which results in the efficient synthesis and secretion of biologically important molecules. Further, there is described as a composition of matter, a transgenic mammal having the ability to reproduce itself and being suitable for the secretion of biologically active agents into its milk. Additionally there is disclosed as a composition of matter, recombinant DNA gene complexes designed to integrate into a mammalian genome and to synthesize and secrete biological active agents into the milk. Furthermore methods of producing and using altered milk are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 56 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 15

ACCESSION NUMBER: 1995:846039 CAPLUS
DOCUMENT NUMBER: 123:284064
TITLE: Heat denaturation and emulsifying properties of egg yolk phosvitin
AUTHOR(S): Chung, Siew Lian; Ferrier, Les K.
CORPORATE SOURCE: Dep. of Animal and Poultry Science, Univ. of Guelph, Guelph, ON, N1G 2W1, Can.
SOURCE: Journal of Food Science (1995), 60(5), 906-8
CODEN: JFDSAZ; ISSN: 0022-1147
PUBLISHER: Institute of Food Technologists
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Phosvitin in water at pH 7 had a denaturation temperature (Td) of 79.7 ± 1.4°C when heated at 10°C/min. When dissolved in 0.1 M and 1.0 M NaCl, the Td decreased to 77.7 ± 1.2°C and 77.2 ± 1.3°C, resp., and in 10 and 20% sucrose there was no change in Td. Heat treatment of phosvitin solns. at ≥65°C led to decreased emulsifying activity (EA). The emulsion stability (ES) decreased when phosvitin solns. were heated at 70, 80 or 96°C for up to 60 min. The ES was not affected ($p < 0.05$) for phosvitin solns. after heating at ≤67.5°C for up to 60 min.

L20 ANSWER 57 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:578869 CAPLUS
DOCUMENT NUMBER: 127:253099
TITLE: Characterization of emulsion prepared with lipophilized gelatin and its application for the induction of vitellogenesis in Japanese eel Anguilla japonica
AUTHOR(S): Sato, N.; Kawazoe, I.; Suzuki, Y.; Aida, K.
CORPORATE SOURCE: Dept. Fisheries, Fac. Agriculture, The University of Tokyo, Bunkyo, 113, Japan
SOURCE: Proceedings of the International Symposium on the Reproductive Physiology of Fish, 5th, Austin, TX, July 2-8, 1995 (1995), 140. Editor(s): Goetz, Frederick W.; Thomas, Peter. Fish Symposium 95: Austin, Tex.
CODEN: 64ZGA9
DOCUMENT TYPE: Conference
LANGUAGE: English

AB A new water-in-oil-in-water (W/O/W) emulsion using lipophilized gelatin (LG) and cottonseed oil was developed for the administration of hormones. Plasma profiles of salmon gonadotropin (GtH II) in eels showed gradual changes when the LG emulsion containing salmon pituitary extract was administered to fish. The immature Japanese eel (BW 566-1017 g) received weekly i.m. injections of LG emulsion, water-in-oil (W/O) emulsion prepared with Freund incomplete adjuvant (FIA), or saline solution each of which contained salmon pituitary GtH fractions. The LG emulsion was more effective than the other treatments in inducing vitellogenesis in the eels.

L20 ANSWER 58 OF 93 CABA COPYRIGHT 2007 CABI on STN
ACCESSION NUMBER: 95:174493 CABA
DOCUMENT NUMBER: 19951110625
TITLE: Induction of yolk formation in hemipteran previtellogenic oocytes (Dysdercus intermedius)
AUTHOR: Dittmann, F.; Biczkowski, M.
CORPORATE SOURCE: Department of Developmental Physiology, Zoological Institute, University of Tubingen, Auf der Morgenstelle 28, D-72076 Tubingen, Germany.
SOURCE: Invertebrate Reproduction and Development, (1995) Vol. 28, No. 1, pp. 63-70. 30 ref.
ISSN: 0168-8170
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 20 Oct 1995
Last Updated on STN: 20 Oct 1995

AB Yolk formation was studied in previtellogenic oocytes of the telotrophic-merositic ovariole of the pyrrhocorid Dysdercus intermedius in the absence of the follicular epithelium ('skinned oocytes'). Early preparation for endocytosis was seen by urea gel electrophoresis and immunoblotting, which showed that cytosolic clathrin (light chain) is already present in the previtellogenic trophocyte-oocyte syncytium. The ability of these previtellogenic skinned oocytes to form yolk was studied by incubating them in physiological saline to which rhodamine-labelled haemolymph proteins were added. These oocytes formed a peripheral band of fluorescent yolk sphere when incubated in vitellogenin -containing haemolymph proteins obtained from 6-day-old adult females but not when in haemolymph proteins from 3-day-old females, which lack vitellogenin. AVEC-DIC microscopy was used to record fluorescent protein uptake as it occurred in living, previtellogenic oocytes. Adsorption to the oolemma, endocytosis and deposition in larger vesicles in the oocyte cortex could be followed. The presence of coated pits and cortical yolk spheres in previtellogenic skinned oocytes was confirmed by electron microscopy. While juvenile hormone is known to be required for vitellogenin secretion by the fat body and for its penetration of the follicular epithelium, these results suggest that yolk formation by oocytes is more directly induced simply by exposure to vitellogenin.

L20 ANSWER 59 OF 93 DISSABS COPYRIGHT (C) 2007 ProQuest Information and Learning Company; All Rights Reserved on STN
ACCESSION NUMBER: 95:28676 DISSABS Order Number: AAIC403149 (not available for sale by UMI)
TITLE: CLONING AND HORMONAL REGULATION OF TRANSCRIPTION OF XENOPUS EGG-COAT PROTEIN GENES
AUTHOR: MEHTA, RAJ JALISUKHLAL [PH.D.]
CORPORATE SOURCE: OPEN UNIVERSITY (UNITED KINGDOM) (0949)
SOURCE: Dissertation Abstracts International, (1994) Vol. 56, No. 2C, p. 391. Order No.: AAIC403149 (not available for sale by UMI).
DOCUMENT TYPE: Dissertation
FILE SEGMENT: DAI
LANGUAGE: English
ENTRY DATE: Entered STN: 19950608
Last Updated on STN: 19950608

AB Comparison of tissue specific regulation by oestrogen of Xenopus vitellogenin and FOSP-1 gene expression would enhance our understanding of tissue-specific action of nuclear hormones in general. The first part of this thesis is therefore concerned with the cloning and characterisation of full length cDNA and promoter elements of FOSP-1.

Using the DNA sequence information from a previously isolated 3$\sp\prime$ end partial FOSP-1 cDNA clone, the full length version was cloned using a combination of 5$\sp\prime$ RACE (rapid amplification of

cDNA ends) and RT-PCR (reverse transcriptase-polymerase chain reaction) procedures, which led to identification of two gene copies of FOSP-1, termed FOSP-1A and FOSP-1B. Cloning of the full length FOSP-1A and partial FOSP-1B cDNAs revealed that they belong to a new class of egg coat proteins. Comparison of FOSP-1A and FOSP-1B cDNA sequence revealed a high degree of homology, especially towards the 5$\sp\prime$ end. Screening of Xenopus genomic library with a FOSP-1A cDNA probe resulted in the unexpected isolation of a single clone that coded for FOSP-1B gene, so that the cloning of FOSP-1A promoter necessitated cloning of a FOSP-1A specific probe derived from the first intron of the FOSP-1 genes. DNA sequence analysis of the FOSP-1A and FOSP-1B genomic clones allowed a detailed comparison of the transcriptional regulatory elements of the two promoters.

Preliminary investigation of transcriptional regulation of FOSP-1 genes was carried out by transient transfection of human and Xenopus tissue culture cells with FOSP-1A and FOSP-1B promoter-CAT constructs. Basal transcription from FOSP-1A promoter was greater than that from FOSP-1B when transfected into Xenopus XTC-2 cells. However, when co-transfected with Xenopus oestrogen receptor (xER) expression construct, only transcription from FOSP-1B promoter, which contains two oestrogen response elements (EREs), exhibited oestrogen-dependent upregulation.

One of the aims of this thesis was also to establish a hormone responsive in vitro transcription system that can be used for identification of trans-acting factors involved in the tissue-specific action of oestrogen in Xenopus. Towards this end, I describe partial optimisation of in vitro transcription in nuclear extracts (NE) derived from female Xenopus liver and HeLa cells. Activation of transcription from vitellogenin gene B1 promoter in female liver NE required supplementation with xER, which was prepared by over-expression of the xER cDNA in Sf9 insect cells using the baculovirus expression system. In attempts to derive a hybrid extract in vitro transcription system, addition of HeLa NE to the xER-supplemented liver NE resulted in inhibition of the ER-dependent up-regulation of in vitro transcription from vitellogenin B1 promoter. Preparation of xER using the baculovirus expression system also allowed characterisation of its DNA binding properties by electrophoretic mobility shift assay. As reported for human and mouse ER, it was found that at low temperatures (0$\sp\circ$C), xER bound ERE independently of exogenously added oestradiol-17β (E$\sb2$), while at 37$\sp\circ$C, the xER-ERE interaction was strictly E$\sb2$-dependent. The xER also bound with different affinities to both the imperfect EREs within the FOSP-1B promoter but the interaction with the two EREs was not cooperative. (Abstract shortened by UMI.)

L20 ANSWER 60 OF 93 USPATFULL on STN

ACCESSION NUMBER:	94:33155 USPATFULL
TITLE:	DNA sequences to target proteins to the mammary gland for efficient secretion
INVENTOR(S):	Rosen, Jeffrey M., Houston, TX, United States
PATENT ASSIGNEE(S):	GenPharm International, Inc., Mountain View, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5304489		19940419
APPLICATION INFO.:	US 1990-602066		19901024 (7)

RELATED APPLN. INFO.:	Continuation of Ser. No. US 1987-14952, filed on 17 Feb 1987, now abandoned
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Chambers, Jasemine C.
LEGAL REPRESENTATIVE:	Townsend and Townsend Khourie and Crew
NUMBER OF CLAIMS:	14
EXEMPLARY CLAIM:	1

NUMBER OF DRAWINGS: 9 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 893
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Described is a method of targeting specific genes to the mammary gland which results in the efficient synthesis and secretion of biologically important molecules. Further, there is described as a composition of matter, a transgenic mammal having the ability to reproduce itself and being suitable for the secretion of biologically active agents into its milk. Additionally there is disclosed as a composition of matter, recombinant DNA gene complexes designed to integrate into a mammalian genome and to synthesize and secrete biological active agents into the milk. Furthermore methods of producing and using altered milk are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 61 OF 93 USPATFULL on STN
ACCESSION NUMBER: 94:5669 USPATFULL
TITLE: Oral-hygiene/dentifrice preparations which protect dental enamel
INVENTOR(S): Wuelknitz, Peter, Langenfeld, Germany, Federal Republic of
Laska, Hans, Duesseldorf, Germany, Federal Republic of
Ploeger, Walter, Hilden, Germany, Federal Republic of
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Duesseldorf, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5279814		19940118	
	WO 9113607		19910919	
APPLICATION INFO.:	US 1992-934671		19920909	(7)
	WO 1991-EP372		19910228	
			19920909	PCT 371 date
			19920909	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1990-4007431	19900309

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rose, Shep K.
LEGAL REPRESENTATIVE: Szoke, Ernest G., Jaeschke, Wayne C., Wisdom, Jr., Norvell E.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 296
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Combinations of fluoride or monofluorophosphate with phosvitin or soluble salts thereof provide superior protection against demineralization of tooth enamel when used in oral hygiene compositions such as toothpastes and mouthwashes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 62 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:219509 CAPLUS
DOCUMENT NUMBER: 118:219509
TITLE: Cosmetics containing phosvitins
INVENTOR(S): Suzuki, Yasuhiro; Nishimori, Yasutomo; Hata, Takako; Ookochi, Yumiko; Sato, Masahiro; Nakano, Hiroyuki
PATENT ASSIGNEE(S): Pola Kasei Kogyo Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05025032	A	19930202	JP 1991-205530	19910722

PRIORITY APPLN. INFO.: JP 1991-205530 19910722

AB Skin-moisturizing cosmetics contain phosvitins and/or partial hydrolyzates of phosvitins. A cosmetic lotion containing H2O 78.7, glycerin 5.0, propylene glycol 4.0, phosvitin 0.2, polyoxyethylene sorbitan monolaurate 1.5, polyoxyethylene lauryl ether 0.5, EtOH 10.0, and perfume 0.1 weight% was formulated.

L20 ANSWER 63 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 16
ACCESSION NUMBER: 1993:511573 CAPLUS
DOCUMENT NUMBER: 119:111573
TITLE: Competitive displacement of proteins in oil-in-water emulsions containing calcium ions
AUTHOR(S): Hunt, Josephine A.; Dickinson, Eric; Horne, David S.
CORPORATE SOURCE: Procter Department of Food Science, University of Leeds, Leeds, LS2 9JT, UK
SOURCE: Colloids and Surfaces, A: Physicochemical and Engineering Aspects (1993), 71(2), 197-203
CODEN: CPEAEH; ISSN: 0927-7757
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The influence of calcium ions on the time-dependent competitive adsorption of phosvitin and β-casein at pH7 has been investigated at the emulsion droplet surface by monitoring the protein content of the aqueous phase. In the absence of calcium ions, addition of β-casein to a phosvitin-stabilized oil-in-water emulsion (0.5 weight% protein, 20 weight% n-tetradecane) results in 70% of the originally adsorbed phosvitin becoming displaced within a few minutes, followed by the loss of a further 10% over a 48h period. In contrast, when calcium ions are present at a concentration sufficient to cause droplet aggregation in the mixed emulsion, no phosvitin is desorbed, despite substantial adsorption of the added β-casein. But, when calcium ions are present in insufficient quantity to cause aggregation, displacement of phosvitin by β-casein is facilitated. The incorporation of calcium ions prior to homogenization increases the amount of phosvitin at the emulsion droplet surface. The interfacial shear viscosity of an adsorbed phosvitin film at the planar oil-water interface is markedly increased when calcium ions are present.

L20 ANSWER 64 OF 93 PASCAL COPYRIGHT 2007 INIST-CNRS. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 1994-0292626 PASCAL
COPYRIGHT NOTICE: Copyright .COPYRGT. 1994 INIST-CNRS. All rights reserved.
TITLE (IN ENGLISH): Competitive displacement of proteins in oil-in-water emulsions containing calcium ions
AUTHOR: HUNT J. A.; DICKINSON E.; HORNE D. S.
CORPORATE SOURCE: Univ. Leeds, Procter dep. food sci., Leeds West Yorks. LS2 9JT, United Kingdom
SOURCE: Colloids and surfaces A : Physicochemical and engineering aspects, (1993), 71(2), 197-203, 12 refs.
DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: Netherlands
LANGUAGE: English

AVAILABILITY: INIST-18274 A, 354000033958790090
AN 1994-0292626 PASCAL

AB The influence of calcium ions on the time-dependent competitive adsorption of phosvitin and β-casein at pH 7 has been investigated at the emulsion droplet surface by monitoring the protein content of the aqueous phase. In the absence of calcium ions, addition of β-casein to a phosvitin-stabilised oil-in-water emulsion (0.5 weight% protein, 20 weight% n-tetradecane) results in 70% of the originally adsorbed phosvitin becoming displaced within a few minutes, followed by the loss of a further 10% over a 48 h period. In contrast, when calcium ions are present at a concentration sufficient to cause droplet aggregation in the mixed emulsion, no phosvitin is desorbed, despite substantial adsorption of the added β-casein

L20 ANSWER 65 OF 93 CABA COPYRIGHT 2007 CABI on STN DUPLICATE 17
ACCESSION NUMBER: 93:89765 CABA
DOCUMENT NUMBER: 19930460573
TITLE: Calcium induced flocculation of emulsions containing adsorbed phosvitin or [beta]-casein
AUTHOR: Hunt, J. A.; Dickinson, E.; Horne, D. S.; Dickinson, E. [EDITOR]; Walstra, P. [EDITOR]
CORPORATE SOURCE: Procter Department of Food Science, University of Leeds, Leeds LS2 9JT, UK.
SOURCE: Food colloids and polymers: stability and mechanical properties, (1993) pp. 66-70. Special Publication No. 113. 10 ref.
Publisher: Royal Society of Chemistry. Cambridge
Price: <pounds>69.50
Meeting Info.: Food colloids and polymers: stability and mechanical properties.
ISBN: 0-85186-325-6
PUB. COUNTRY: United Kingdom
DOCUMENT TYPE: Conference Article
LANGUAGE: English
ENTRY DATE: Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994
AB The flocculation behaviour was studied of oil-in-water emulsions (0.5 wt% protein, 20 wt% n-tetradecane, pH 7.0) when stabilized with phosvitin emulsifier of [beta]-casein before or after addition of Ca2+, focusing particularly on reversibility aspects. Addition of Ca2+ to a level of 5 mM in the aqueous phase did not affect droplet size distribution in casein-stabilized emulsions, but resulted in a bi-modal distribution, indicative of flocculation, in phosvitin -stabilized emulsions (PSE). The calcium-induced flocculation was reversible. When highly flocculated PSE containing 15 mM Ca2+ was mixed in various proportions with Ca-free PSE, redistribution of Ca2+ occurred, resulting in various degrees of flocculation.

L20 ANSWER 66 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:558551 CAPLUS
DOCUMENT NUMBER: 119:158551
TITLE: Calcium-induced flocculation of emulsions containing absorbed phosvitin or β-casein
AUTHOR(S): Hunt, Josephine A.; Dickinson, Eric; Horne, David S.
CORPORATE SOURCE: Procter Dep. Food Sci., Univ. Leeds, Leeds, LS2 9JT, UK
SOURCE: Special Publication - Royal Society of Chemistry (1993), 113(Food Colloids and Polymers: Stability and Mechanical Properties), 66-70
CODEN: SROCDO; ISSN: 0260-6291

DOCUMENT TYPE: Journal
LANGUAGE: English
AB Flocculation behavior of phosvitin-stabilized emulsions in the presence of Ca2+ was compared to β-casein-stabilized emulsions. Ca2+ did not significantly alter the size-distribution for the β-casein emulsion, whereas in the case of phosvitin a bimodal distribution is formed in the presence of Ca2+, indicating flocculation. This Ca2+-induced flocculation of phosvitin-stabilized emulsions was reversible upon dilution with buffer or mixing with Ca2+-free emulsions. Clearly, Ca2+ has considerable influence on the flocculation behavior of both β-casein and phosvitin emulsions.

L20 ANSWER 67 OF 93 USPATFULL on STN
ACCESSION NUMBER: 92:63323 USPATFULL
TITLE: Fine filling method and fine filler for dental purposes
INVENTOR(S): Kuboki, Yoshinori, Sapporo, Japan
PATENT ASSIGNEE(S): Kabushiki Kaisha Sangi, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5135396		19920804
APPLICATION INFO.:	US 1990-545357		19900726 (7)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1989-407711, filed on 14 Sep 1989, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Millin, V.
LEGAL REPRESENTATIVE: Finnegan, Henderson, Farabow, Garrett & Dunner
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
LINE COUNT: 464
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A fine filling method for dental purposes is characterized in that a fine filler in the form of a powder, a granulate, a suspension or paste, containing finely divided particles of hydroxy-apatite or tetracalcium phosphate, with or without an adjuvant, is rubbed on the surface of a tooth and contacted with saliva. The fine filler for use in this method may contain a calcification-promoting protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 68 OF 93 FROSTI COPYRIGHT 2007 LFRA on STN
ACCESSION NUMBER: 289766 FROSTI
TITLE: The effect of calcium ions on the competitive displacement of proteins.
AUTHOR: Hunt J.A.; Dickinson E.
SOURCE: Gums and stabilisers for the food industry 6: Proceedings of the 6th International Conference, Clwyd, July 1991., Published by: IRL Press, Oxford, 1992, 395-9 (10 ref.)
Phillips G.O.; Williams P.A.; Wedlock D.J.
ISBN: 0-19-963284-7
DOCUMENT TYPE: Conference Article
LANGUAGE: English
SUMMARY LANGUAGE: English
AB The primary mechanism of emulsion stabilisation is provided by the adsorption of a protein layer at the oil-water interface. Competitive displacement of the egg-yolk protein, phosvitin, by beta-casein was investigated in the presence of calcium ions. In the absence of calcium beta-casein was found to displace 70% of adsorbed phosvitin in a few minutes. In the presence of calcium the phosvitin is not displaced at all. The mechanism of the effect is discussed.

L20 ANSWER 69 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 18
ACCESSION NUMBER: 1993:146402 CAPLUS
DOCUMENT NUMBER: 118:146402
TITLE: Calcium induced flocculation of emulsions containing adsorbed β-casein or phosvitin
AUTHOR(S): Dickinson, Eric; Hunt, Josephine A.; Horne, David S.
CORPORATE SOURCE: Procter Dep. Food Sci., Univ. Leeds, Leeds, LS2 9JT, UK
SOURCE: Food Hydrocolloids (1992), 6(4), 359-70
CODEN: FOHYES; ISSN: 0268-005X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The influence of calcium ions on the state of aggregation of β-casein- and phosvitin-stabilized oil-in-water emulsions (0.5% protein, 20% n-tetradecane by weight, pH 7) has been investigated. The extent and reversibility of flocculation was inferred from changes in apparent droplet-size distribution measured by the Malvern Mastersizer, and from direct observations under the light microscope. Complementary measurements are reported for the calcium binding isotherms for β-casein and phosvitin in solution and for the effect of calcium ions on the electrophoretic mobilities of protein-coated droplets. With calcium ions present prior to homogenization, the extent of droplet flocculation is greater for β-casein-stabilized emulsions than for phosvitin-stabilized emulsions. This can be explained by the greater tendency of β-casein to be precipitated by calcium. Conversely, with calcium ions added after homogenization, it is the phosvitin-stabilized emulsions which are more susceptible to flocculation. This can be explained in terms of the greater binding affinity of phosvitin for calcium ions. Under conditions where protein solubility is not affected, the authors find that calcium-induced aggregation of these protein-coated droplets is reversible both towards dilution with buffer solution and towards dilution with calcium-free emulsion.

L20 ANSWER 70 OF 93 BIOTECHNO COPYRIGHT 2007 Elsevier Science B.V. on STN
ACCESSION NUMBER: 1992:22108815 BIOTECHNO
TITLE: Yolk lipids
AUTHOR: Kuksis A.
CORPORATE SOURCE: BBDMR, Univ. of Toronto, 112 College Street,Toronto, Ont. M5G 1L6, Canada.
SOURCE: Biochimica et Biophysica Acta - Lipids and Lipid Metabolism, (1992), 1124/3 (205-222)
CODEN: BBLLA6 ISSN: 0005-2760
DOCUMENT TYPE: Journal; General Review
COUNTRY: Netherlands
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 1992:22108815 BIOTECHNO
AB The mature egg yolk of the domestic hen possesses remarkably constant lipid and lipoprotein composition despite much variation in dietary and environmental conditions. The greatest differences are seen in the fatty acid composition of the triacylglycerols which may show significant alterations in the content of the minor acids including certain polyunsaturated acids. The lipid class composition appears to be minimally affected by dietary influences, including the cholesterol content of the diet. The limited dietary influence on the yolk lipid composition extends to different strains of the hens. Genetic selection has led to some increase in the cholesterol content of the egg, but the desired lowering of the cholesterol content of egg yolk has not been realized. Likewise, production of a polyunsaturated fatty acid egg does not appear to be practical. As a result the egg yolk continues to provide a food product of nearly constant composition, which serves to maintain its chemical and

physico-chemical properties for reliable utilization in the baking, cosmetic and pharmaceutical industries. The great uniformity in the composition of the egg yolk phospholipids makes them desirable starting materials for partial chemical resynthesis of glycerophospholipids. Partial hydrogenation of the egg yolk lipids promises to further increase the utility of the product as a desirable material for the manufacture of liposomes and liposome based drug products. In contrast, the constancy of the egg yolk composition and the inability to alter it significantly by dietary or genetic means also renders egg yolk undesirable for unlimited human consumption. Excessive ingestion of egg yolk raises plasma lipid and cholesterol levels which are believed to contribute to the development of heart disease. The physico-chemical and biological properties of egg yolk apoproteins have been less extensively investigated and their function is less well understood. The finding that phosvitin is a effective chelator of metal ions and thus an effective antioxidant demonstrates that egg yolk lipoproteins possess as yet unexplored potential for beneficial nutritional, medical and industrial application.

L20 ANSWER 71 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 19
ACCESSION NUMBER: 1992:150304 CAPLUS
DOCUMENT NUMBER: 116:150304
TITLE: pH and sodium chloride effects on emulsifying properties of egg yolk phosvitin
AUTHOR(S): Chung, Shiew Lian; Ferrier, Les K.
CORPORATE SOURCE: Dep. Anim. Poult. Sci., Univ. Guelph, Guelph, ON, N1G 2W1, Can.
SOURCE: Journal of Food Science (1992), 57(1), 40-2
CODEN: JFDSAZ; ISSN: 0022-1147
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The emulsifying properties of phosvitin dissolved in water and 0.1, 0.5, and 1.0M NaCl were determined at pH 3-10. The change in emulsifying activity (EA) with pH was slight but significant and emulsion stability (ES) was relatively high (68-73%), except at pH 5 (17%) and 10 (48%). The EA of phosvitin was higher than that of bovine serum albumin (BSA) at pH 3 or 8 and ES was higher than BSA at all pH levels except at pH 5 and 10. Added NaCl decreased the EA of phosvitin at pH 3 and 10 and decreased the ES between pH 3 and 9. Increased instability of emulsions resulted mainly in coalescence of oil droplets at ≥0.05M NaCl. Salt increased the viscosity of phosvitin emulsion at pH 3 but not at pH >5. The viscosities of BSA emulsions were higher than those of phosvitin at pH 3, 5, or 8.

L20 ANSWER 72 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 20
ACCESSION NUMBER: 1991:654614 CAPLUS
DOCUMENT NUMBER: 115:254614
TITLE: Conditions affecting emulsifying properties of egg yolk phosvitin
AUTHOR(S): Chung, Siew Lian; Ferrier, Les K.
CORPORATE SOURCE: Dep. Anim. Poult. Sci., Univ. Guelph, Guelph, ON, N1G 2W1, Can.
SOURCE: Journal of Food Science (1991), 56(5), 1259-62
CODEN: JFDSAZ; ISSN: 0022-1147
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of protein concentration (0.1-2.0%), oil volume fraction (0.17-0.67), mixing speed (10,000-22,000 rpm), and mixing time (0.5-8 min) on the emulsifying properties of phosvitin and bovine serum albumin (BSA) were compared. Emulsifying activity and emulsion stability increased with protein concentration, oil volume fraction, and mixing. Effects of these variables were assessed quant. using an empirical equation. Mixing speed had the greatest influence and protein concentration had the least influence on

emulsifying activity for both phosvitin and BSA. For emulsion stability, mixing speed had the greatest influence for phosvitin ; oil volume fraction had the greatest influence for BSA. Phosvitin was a better emulsifier than BSA at pH 7.

L20 ANSWER 73 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 21
ACCESSION NUMBER: 1991:630712 CAPLUS
DOCUMENT NUMBER: 115:230712
TITLE: Competitive adsorption of phosvitin with milk proteins in oil-in-water emulsions
AUTHOR(S): Dickinson, Eric; Hunt, Josephine A.; Dalgleish, Douglas G.
CORPORATE SOURCE: Procter Dep. Food Sci., Univ. Leeds, Leeds, LS2 9JT, UK
SOURCE: Food Hydrocolloids (1991), 4(5), 403-14
CODEN: FOHYES; ISSN: 0268-005X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Competitive absorption at pH 7 was investigated at the emulsion droplet surface and the planar oil-water interface for binary mixts. of the egg-yolk protein, phosvitin, and β-casein or β-lactoglobulin. Anal. of the aqueous phase of n-tetradecane-in-water emulsions made with a mixture of phosvitin + milk protein (0.5 weight% total protein) indicates that the milk protein predominates at the surface. This is thermodynamically consistent with the much lower surface activity of phosvitin at the n-tetradecane-water interface. In expts. involving addition of milk protein after emulsification, β-casein displaces 70% of adsorbed phosvitin within a few minutes, and then another 10% over a period of 48 h, whereas β-lactoglobulin displaces 57% within a few minutes, but none thereafter. Taken together with previous results for the competitive adsorption of different milk proteins, the data are used to discuss how the time-dependent displacement behavior of a disordered protein β-casein differs from that of structural globular protein β-lactoglobulin. Special features of the adsorption behavior of phosvitin are related to its high level of phosphorylation and high charge d.

L20 ANSWER 74 OF 93 USPATFULL on STN
ACCESSION NUMBER: 90:67204 USPATFULL
TITLE: Fine filling method and fine filler for dental purposes
INVENTOR(S): Kuboki, Yoshinori, Sapporo, Japan
PATENT ASSIGNEE(S): Kabushiki Kaisha Sangi, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4952148		19900828
APPLICATION INFO.:	US 1989-407711		19890914 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1988-183616, filed on 19 Apr 1988, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1987-161367	19870630

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Millin, V.
LEGAL REPRESENTATIVE: Finnegan, Henderson, Farabow, Garrett & Dunner
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
LINE COUNT: 455
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A fine filling method for dental purposes is characterized in that a powder, a granulate, a solution (suspension) or paste containing hydroxy-apatite with or without an adjuvant is rubbed on the

surface of teeth. A fine filler for use in this method is characterized in that a calcification-promoting protein is incorporated in hydroxy-apatite or tetracalcium phosphate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 75 OF 93 USPATFULL on STN
ACCESSION NUMBER: 90:46397 USPATFULL
TITLE: Oral preparations
INVENTOR(S): Bristow, Neil J., New South Wales, Australia
Carter, Peter, Burton, Great Britain
Coulson, Bryony E., Port Sunlight, Great Britain
Trevethan, Michael A., Bebington, Great Britain
PATENT ASSIGNEE(S): Unilever Patent Holdings B.V., Rotterdam, Netherlands (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4933173		19900612
APPLICATION INFO.:	US 1989-354657		19890519 (7)

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1988-11829	19880519

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rose, Shep K.
LEGAL REPRESENTATIVE: Honig, Milton L.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
LINE COUNT: 213
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to oral preparations having anti-caries activity. The compositions comprise a water-soluble casein material or sodium trimetaphosphate as an anti-caries agent, and a particulate hydroxyapatite as a compatible abrasive material.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 76 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 22
ACCESSION NUMBER: 1991:60582 CAPLUS
DOCUMENT NUMBER: 114:60582
TITLE: Antioxidant effect of egg yolk on linoleate in emulsions
AUTHOR(S): Yamamoto, Yukiko; Sogo, Noriko; Iwao, Rika; Miyamoto, Teijiro
CORPORATE SOURCE: Fac. Sci. Living, Osaka City Univ., Osaka, 558, Japan
SOURCE: Agricultural and Biological Chemistry (1990), 54(12), 3099-104
CODEN: ABCHA6; ISSN: 0002-1369
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The antioxidant activity of whole egg, egg albumen, and egg yolk was estimated Egg yolk had strong antioxidant activity on linoleate in an emulsion both with and without Fe2+. The relationship between the antioxidant activity and the components of the egg yolk was also investigated. The low-d. lipoprotein (LDL) fraction of yolk had very weak activity, the granule fraction having the strong antioxidant activity in egg yolk. Phosvitin, a potent antioxidant, had weak activity in this system, but the activity was elevated by combining the phosvitin fraction with the LDL fraction. When egg yolk was heated at 80° for 30 min, its activity decreased. Both a phosvitin and native lipoprotein structure may be necessary for the antioxidant activity of the yolk granules.

L20 ANSWER 77 OF 93 LIFESCI COPYRIGHT 2007 CSA on STN
ACCESSION NUMBER: 90:24414 LIFESCI
TITLE: Purification and characterization of a novel calcium-dependent protein kinase from soybean.
AUTHOR: Putnam-Evans, C.L.; Harmon, A.C.; Cormier, M.J.
CORPORATE SOURCE: Dep. Bot., Univ. Florida, Gainesville, FL 32611, USA
SOURCE: BIOCHEMISTRY (WASH.)., (1990) vol. 29, no. 10, pp. 2488-2495.
DOCUMENT TYPE: Journal
FILE SEGMENT: L
LANGUAGE: English
SUMMARY LANGUAGE: English
AB A novel calcium-dependent protein kinase (CDPK) previously reported to be activated by the direct binding of Ca super(2+), and requiring neither calmodulin nor phospholipids for activity, was purified to >95% homogeneity from suspension-cultured soybean cells (Glycine max , L. Wayne). Purification was achieved by chromatography on DEAE-cellulose, phenyl-Sepharose, Sephadex G-100, and Blue Sepharose. The purified enzyme (native molecular mass = 52,200 Da) resolved into two immunologically related protein bands of 52 and 55 kDa on 10% SDS gels. Enzyme activity was stimulated 40-100-fold by micromolar amounts of free calcium (K sub(0.5) = 1.5 mu M free calcium) and was dependent upon millimolar Mg super(2+). CDPK phosphorylated lysine-rich histone III-S and chicken gizzard myosin light chains but did not phosphorylate arginine-rich histone, phosvitin, casein, protamine, or Kemptide.

L20 ANSWER 78 OF 93 AQUASCI COPYRIGHT 2007 FAO (On behalf of the ASFA Advisory Board). All rights reserved. on STN DUPLICATE 23
ACCESSION NUMBER: 90:3804 AQUASCI
DOCUMENT NUMBER: ASFA1 1990 20-21537
TITLE: Seasonal and estradiol-17 beta -stimulated changes in thyroid function of adult Geotria australis , a Southern Hemisphere lamprey.
AUTHOR: Leatherland, J.F.; Macey, D.J.; Hilliard, R.W.; Leatherland, A.; Potter, I.C.
CORPORATE SOURCE: Dep. Zool., Univ. Guelph, Guelph, Ont. N1G 2W1, Canada
SOURCE: FISH PHYSIOL. BIOCHEM., (1990) vol. 8, no. 5, pp. 409-417.
DOCUMENT TYPE: Journal
FILE SEGMENT: ASFA1
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Measurable in vitro hepatic monodeiodinase activity of the southern hemisphere lamprey, Geotria australis , was present only during the first 5 of the 16 month upstream spawning migration of this species. Production of T3 from T4 in vitro was pH-sensitive, and exhibited typical Michaelis-Menton kinetics. No consistent differences in the serum T4 concentrations were found in animals sampled at different times during the period of their residence in fresh water. However, serum T3 concentrations underwent a progressive decline during this period. Estradiol-17 beta (E2), administered as a suspension in hydrogenated coconut oil, induced a lowering of serum T4 concentrations and a rise in serum T3:T4 ratios, but had no measureable effect on liver size and serum concentrations of total calcium and protein. In males, E2 induced production of a small amount of serum protein assumed to be vitellogenin, but there was no conspicuous increase in the amount of the same protein in females. This response to E2-challenge parallels more closely that of cyprinids than that of salmonids.

L20 ANSWER 79 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:465069 CAPLUS
DOCUMENT NUMBER: 113:65069
TITLE: Liposomes containing amino acids and peptides and proteins for skin care

INVENTOR(S): Pauly, Marc; Koulbanis, Constantin
PATENT ASSIGNEE(S): Laboratoires Serobiologiques S. A., Fr.
SOURCE: Fr. Demande, 20 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2627385	A1	19890825	FR 1989-1439	19890203
FR 2627385	B3	19910823		

PRIORITY APPLN. INFO.: FR 1989-1439 19890203
OTHER SOURCE(S): MARPAT 113:65069
AB Cosmetics and dermatol. compns. comprise amino acids, peptides or proteins, incorporated into liposomes as skin nutrients. The proteins may originate from placenta, blood, milk, yeast, etc. A liposome composition comprised phospholipids 90 and cholesterol 10% in the lipid phase, and plasma hydrolyzate 10.00, glutathione 0.15, carnosine 1.00, methylparaben 0.20, and water to 100%, in the active aqueous phase.

L20 ANSWER 80 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:428371 CAPLUS
DOCUMENT NUMBER: 111:28371
TITLE: Compositions comprising nitrogen-containing substances, for cosmetic and pharmaceutical use
INVENTOR(S): Pauly, Marc
PATENT ASSIGNEE(S): Laboratoires Serobiologiques S. A., Fr.
SOURCE: Fr. Demande, 24 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2609393	A1	19880715	FR 1988-2164	19880223

PRIORITY APPLN. INFO.: FR 1988-2164 19880223
OTHER SOURCE(S): MARPAT 111:28371
AB Pharmaceutical or cosmetic base compns. contain ≥1 N-containing substance, notably an amino acid, an oligo- or polypeptide, a protein, and their derivs. A liposome formulation contained in the lipid phase 90% by weight phospholipids and 10% by weight cholesterol; the aqueous phase contained tyrosine 0.30, arginine 0.30, methylparaben 0.10, and H2O to 100% by weight

L20 ANSWER 81 OF 93 FSTA COPYRIGHT 2007 IFIS on STN
ACCESSION NUMBER: 1989(02):Q0004 FSTA
TITLE: Characterization and a selected application of hen's phosvitin and egg yolk as a metal-chelator antioxidant.
AUTHOR: Lu, C. L.
CORPORATE SOURCE: Cornell Univ., Ithaca, NY 14850, USA
SOURCE: Dissertation Abstracts International, B, (1987) 47 (7) 2699: Order no. DA8623138, 152pp.
ISSN: 0419-4217
DOCUMENT TYPE: Dissertation
LANGUAGE: English
AB Preliminary studies examined the metal-chelator antioxidant properties of egg yolk phosvitin in a phospholipid emulsion system.

Further studies evaluated the potential of utilizing egg yolk as an antioxidant by examining the effects of pH and food additives (NaCl, egg albumen, cysteine, ascorbic acid) on the oxidative stability of egg yolk phospholipid and the antioxidant activity of phosvitin. A final study examined the effects of egg yolk (1, 2 and 3%) and phosvitin (0.0625%) on the oxidative stability of patties prepared from mechanically deboned turkey neck meat (NM) or mechanically deboned turkey drumstick meat (DM). The yolk and phosvitin significantly reduced the TBA values of raw and cooked NH patties. DM patties were not protected by either egg yolk or phosvitin.

L20 ANSWER 82 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 24
ACCESSION NUMBER: 1988:36428 CAPLUS
DOCUMENT NUMBER: 108:36428
TITLE: Effects of phosphate residues on the excellent emulsifying properties of phosphoglycoprotein phosvitin
AUTHOR(S): Kato, Akio; Miyazaki, Syoko; Kawamoto, Akifumi; Kobayashi, Kunihiko
CORPORATE SOURCE: Fac. Agric., Yamaguchi Univ., Yamaguchi, 753, Japan
SOURCE: Agricultural and Biological Chemistry (1987), 51(11), 2989-94
CODEN: ABCHA6; ISSN: 0002-1369
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of phosphate residues in phosvitin on its emulsifying properties were investigated. The emulsifying properties, especially the emulsion stability, of phosvitin were much superior to those of bovine serum albumin which is an excellent emulsifier. The emulsifying activity and emulsion stability of phosvitin were greatly decreased by the partial removal of phosphate with phosphatase and by the complete removal of phosphate with alkaline treatment. In addition, the emulsifying properties were decreased by the blocking of phosphate in phosvitin with calcium ion. These results suggest that the electrostatic repulsive force of phosphate in phosvitin significantly affects its emulsifying properties.

L20 ANSWER 83 OF 93 CABA COPYRIGHT 2007 CABI on STN
ACCESSION NUMBER: 91:25322 CABA
DOCUMENT NUMBER: 19910598288
TITLE: Cytosolic and nuclear receptors for juvenile hormone in fat bodies of Leucophaea maderae
AUTHOR: Engelmann, F.; Mala, J.; Tobe, S. S.
CORPORATE SOURCE: Department of Biology, University of California, Los Angeles, CA 90024, USA.
SOURCE: Insect Biochemistry, (1987) Vol. 17, No. 7, pp. 1045-1052. In Fourth International Symposium on Juvenile Hormones: Physiology, Biochemistry and Chemistry (JH IV), 7-11 September 1986, Niagara-on-the-Lake, Ontario, Canada [edited by Tobe, S.S.; Davey, K.G.]. 25 ref.
Price: Journal article; Conference paper
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994
AB Cytosol preparations of fat bodies from adults of L. maderae [Rhyparobia maderae] contained a population of very high affinity juvenile hormone (JH) binding compounds (Kd of 10-9) which was only identifiable by the dextran-coated charcoal assay. These compounds exhibited a 1.5 times higher affinity to the natural enantiomer (10R-JH III) than to the racemate. A binding compound for JH III with similar affinity and identical sedimentation characteristics on sucrose gradients could be extracted from isolated nuclei of only vitellogenic fat bodies, either

natural or (RS)-methoprene induced. This high affinity JH binder could not be extracted from nuclei of fat bodies from males except those males which had been treated with the JH analogue. These same males were induced to synthesize vitellogenin. A population of lower affinity JH binders (Kd of 10-8 M) was identified in cytosol and nuclear extracts by the DCC assay procedure as well as by the polyethylene glycol and hydroxylapatite assays. It is concluded that the high affinity JH binder of cytosol and nuclei of fat bodies is the JH receptor of this species.

L20 ANSWER 84 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 25
ACCESSION NUMBER: 1987:532781 CAPLUS
DOCUMENT NUMBER: 107:132781
TITLE: Effect of pH and food ingredients on the stability of egg yolk phospholipids and the metal-chelator antioxidant activity of phosvitin
AUTHOR(S): Lu, Choing Liang; Baker, Robert C.
CORPORATE SOURCE: Dep. Poult. Avian Sci., Cornell Univ., Ithaca, NY, 14853, USA
SOURCE: Journal of Food Science (1987), 52(3), 613-16
CODEN: JFDSAZ; ISSN: 0022-1147
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Egg yolk phosvitin inhibits metal-catalyzed phospholipid oxidation In this study, a phospholipid emulsion system was used to study the effect of pH and food ingredients on the antioxidant activity of phosvitin and the oxidative stability of yolk phospholipid. Oxidation of phospholipids was carried out at pH 3.0, 5.0, 5.7, 6.1, and 7.8. NaCl and freeze-dried egg albumen were incorporated into the pH 6.1 emulsion. Lipid oxidation was measured by the thiobarbituric acid (TBA) assay. Phospholipids were stable at pH 6.1 and 7.8; however, phosvitin was unable to inhibit Cu2+ catalysis at pH 7.8. Neither NaCl nor albumen affected the stability of phospholipids or the activity of phosvitin in inhibiting Fe2+ catalysis at pH 6.1.

L20 ANSWER 85 OF 93 DISSABS COPYRIGHT (C) 2007 ProQuest Information and Learning Company; All Rights Reserved on STN
ACCESSION NUMBER: 86:15009 DISSABS Order Number: AAR8623138
TITLE: CHARACTERIZATION AND A SELECTED APPLICATION OF HEN'S PHOSVITIN AND EGG YOLK AS A METAL-CHELATOR ANTIOXIDANT
AUTHOR: LU, CHOING-LIANG [PH.D.]
CORPORATE SOURCE: CORNELL UNIVERSITY (0058)
SOURCE: Dissertation Abstracts International, (1986) Vol. 47, No. 7B, p. 2699. Order No.: AAR8623138. 152 pages.
DOCUMENT TYPE: Dissertation
FILE SEGMENT: DAI
LANGUAGE: English
ENTRY DATE: Entered STN: 19921118
Last Updated on STN: 19921118
AB The metal-chelator antioxidant properties of egg yolk phosvitin were studied in a phospholipid emulsion system. The ability and the capacity of phosvitin to inhibit metal-catalyzed lipid oxidations (Cu('2+), Fe('2+) and hemin) were investigated. Lipid oxidation was measured by the thiobarbituric acid (TBA) assay. Phosvitin effectively inhibited Fe('2+)- and Cu('2+)-catalyzed phospholipid oxidation, but did not exert similar effect on hemin catalyzed oxidation reaction. The amount of Fe('2+) that could be affected by phosvitin (up to 30:1 Fe('2+) to phosvitin molar ratio) was much greater than that of Cu('2+) (1:1 molar ratio). Pasteurization (61.2(DEGREES)C, 4 min) did not affect phosvitin 's capacity to inhibit Fe('2+) catalysis; nevertheless, autoclaving (121(DEGREES)C, 10 min) decreased this activity.

Egg yolk being the source of phosvitin, it seemed possible that it might function in the same manner as phosvitin. To evaluate the potential of utilizing egg yolk as an antioxidant, the effects of pH and various

food additives (NaCl, egg albumen, cysteine, and ascorbic acid), on the oxidative stability of egg yolk phospholipid and the antioxidant activity of phosvitin were investigated. Phospholipid was stable at pH 6.1 and 7.8. Phosvitin was unable to inhibit copper catalysis at pH 7.8 due to its reduced copper binding capacity. Neither NaCl nor albumen affected the stability of phospholipid and the antioxidant capacity of phosvitin. Both cysteine and ascorbic acid significantly enhanced phospholipid oxidation for a limited period of time. No apparent effects of these two food additives on the antioxidant activity of phosvitin were demonstrated.

The applications of egg yolk and phosvitin were evaluated to extend the oxidative stability of patties made from mechanically deboned turkey neck meat (MDNM) or drumstick meat (MDDM). Three levels of egg yolk (1%, 2%, and 3%) along with one level of phosvitin (0.0625%) were tested. All of the egg yolks and phosvitin significantly decreased the TBA values of both cooked and uncooked patties of MDNM. Generally, no differences existed among the three concentrations of egg yolk and phosvitin to reduce lipid oxidation in the patties. The antioxidative activity of egg yolk appears to be a result of phosvitin. The patties of MDDM were not protected by either egg yolk or phosvitin.

L20 ANSWER 86 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 26
ACCESSION NUMBER: 1987:100939 CAPLUS
DOCUMENT NUMBER: 106:100939
TITLE: Characteristics of egg yolk phosvitin as an antioxidant for inhibiting metal-catalyzed phospholipid oxidations
AUTHOR(S): Lu, Choing Liang; Baker, Robert C.
CORPORATE SOURCE: Inst. Food Sci., Cornell Univ., Ithaca, NY, 14853, USA
SOURCE: Poultry Science (1986), 65(11), 2065-70
CODEN: POSCAL; ISSN: 0032-5791
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A study was conducted to determine the antioxidant activity of phosvitin in an egg yolk phospholipid emulsion system. Various inorg. and organic metals (Fe2+, Cu2+, and hemin) in several different concns. were added individually to the emulsions to induce lipid oxidation Characteristics of phosvitin for inhibiting these metal-catalyzed lipid oxidns. were investigated. The effect of heat treatments, both pasteurization (61.1°, 4 min) and autoclaving (121.1°, 10 min), on phosvitin was examined to detect any effect on its antioxidant characteristics. Lipid oxidns. were measured by thiobarbituric acid assays. Phosvitin effectively inhibited Fe2+ and Cu2+-catalyzed phospholipid oxidns. over the entire reaction period; however, it did not have similar effects on hemin-catalyzed oxidation Phosvitin had a higher capacity to inhibit iron catalysis of phospholipid oxidns. (up to 30:1 Fe2+/phosvitin molar ratio) than did Cu catalysis (1:1 molar ratio). Pasteurization did not change the antioxidant activities of phosvitin; however, autoclaving decreased its capacity to inhibit iron catalysis.

L20 ANSWER 87 OF 93 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN DUPLICATE 27
ACCESSION NUMBER: 1986:284989 BIOSIS
DOCUMENT NUMBER: PREV198682028852; BA82:28852
TITLE: EFFECT OF HYPOPHYSECTOMY ON ESTROGEN-INDUCED VITELLOGENIN SYNTHESIS IN THE GREEN FROG RANA-ESCULENTA COMPLEX.
AUTHOR(S): GOBBETTI A [Reprint author]; POLZONETTI-MAGNI A; ZERANI M; BOTTE V
CORPORATE SOURCE: DIP BIOL CELL, UNIV CAMERINO, VIA F CAMERINI 2, 62032 CAMERINO, ITALY
SOURCE: Bollettino di Zoologia, (1985) Vol. 52, No. 3-4, pp. 343-346.
CODEN: BZOOAS. ISSN: 0373-4137.
DOCUMENT TYPE: Article

FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 4 Jul 1986
Last Updated on STN: 4 Jul 1986

AB The control mechanism of vitellogenin synthesis and/or release by the liver has been investigated in the green frog, Rana esculenta. The effects of estradiol on vitellogenin serum titres have been evaluated in adult females after hypophysectomy and/or ovariectomy and treatment with cortisol, growth hormone (GH), and homologous pituitary suspensions. The results indicated that the estradiol-dependent vitellogenin synthesis and/or release needs a hypophysial principle (s) to be fully stimulated. Attempts to identify this substance (s) showed that it is different from cortisol and mammalian GH.

L20 ANSWER 88 OF 93 DISSABS COPYRIGHT (C) 2007 ProQuest Information and Learning Company; All Rights Reserved on STN
ACCESSION NUMBER: 84:6607 DISSABS Order Number: AAR8415827
TITLE: IDENTIFICATION AND CHARACTERIZATION OF JUVENILE HORMONE BINDING PROTEINS IN THE COCKROACH LEUCOPHAEA MADERAE (RECEPTORS, HEMOLYMPH, OVARIES)
AUTHOR: KOVALICK, GAE ELAINE [PH.D.]
CORPORATE SOURCE: THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL (0153)
SOURCE: Dissertation Abstracts International, (1984) Vol. 45, No. 4B, p. 1093. Order No.: AAR8415827. 125 pages.
DOCUMENT TYPE: Dissertation
FILE SEGMENT: DAI
LANGUAGE: English
ENTRY DATE: Entered STN: 19921118
Last Updated on STN: 19921118

AB Juvenile hormone (JH) binding proteins were identified in the hemolymph, ovaries, and left colleterial gland of the adult female cockroach Leucophaea maderae. Proteins were extracted from tissue with Tris buffer containing 150-300 mM KCl at pH 7.4. Equilibrium of the JH-binding protein complex was reached within 5 minutes at 23(DEGREES), 4(DEGREES), or -20(DEGREES)C. Phenylmethylsulfonyl fluoride at 6 x 10('-4)M eliminated nonspecific esterase activity in hemolymph and ovarian extracts at low pH, but not in gland extracts or at high pH. A modified polyethylene glycol (PEG) assay was used to precipitate JH-protein complexes. Optimum precipitation occurred with 15-25% PEG and 1.25-4 mg/ml gamma-globulins for 1-90 minutes at 4 or 23(DEGREES)C. Results from this assay and from the dextran-coated charcoal or hydroxylapatite assay were similar.

JH binding components were pronase- and heat-sensitive, saturable, and tissue specific. Using Scatchard analysis an average K of 2.04((+OR-)0.32) x 10('-8)M, 1.91((+OR-)0.80) x 10('-8)M, and 1.86((+OR-)0.31) x 10('-8)M('D) was calculated for hemolymph, ovarian, and colleterial gland binding proteins. JH III had the highest affinity for binding sites, followed by JH I and JH 0. Various extraction procedures using organic solvents caused changes in JH III affinity in hemolymph and ovarian binding proteins. At high concentrations (+) and ((+OR-)) optical isomer preparations of methoprene and hydroprene competed for hemolymph and ovarian JH binding sites. Binding proteins had no affinity for the (-) optical isomer or JH III acid. JH binding capacity in the hemolymph and colleterial gland increased 10-14-fold during ovarian maturation and 18,000-fold in the ovaries. The hemolymph and ovarian JH binding proteins sedimented differently than vitellogenin in sucrose density gradients.

Four diazocarbonyl JH analogs were synthesized and tested as photoaffinity labels to aid in the further characterization of hemolymph and ovarian JH binding proteins. The best competitor with JH for binding sites was 10,11-epoxyfarnesyl diazoacetate (EFDA). Equal or excess concentrations of JH in reaction mixtures prevented irreversible reduction of JH binding capacity in UV-irradiated extracts containing EFDA. {('3)H}EFDA covalently attached to JH binding proteins at the JH binding

site. The K(,D) of binding proteins for {('3)H}EFDA was approximately 2 x 10('-6)M. (('3)H)EFDA bound specifically to one major protein with an estimated molecular weight of 200,000-250,000 in each extract.

L20 ANSWER 89 OF 93 FSTA COPYRIGHT 2007 IFIS on STN
ACCESSION NUMBER: 1983(03):Q0024 FSTA
TITLE: Identification of the components responsible for the gelation of egg yolk during freezing.
AUTHOR: Wakamatu, T.; Sato, Y.; Saito, Y.
CORPORATE SOURCE: Basic Res. Lab., QP Co., Sengawa-cho, Chofu, Tokyo 182, Japan
SOURCE: Agricultural and Biological Chemistry, (1982) 46 (6) 1495-1503, 26 ref.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The aggregates in gelled yolk were isolated by gel filtration with a Sepharose 4B column, after suspension in 1M NaCl, and then they were identified by chemical analysis and sodium dodecyl sulphate polyacrylamide gel electrophoresis. No significant difference was found in lipid and protein composition between the aggregates and the low density lipoprotein in plasma (LDLP). It was concluded that the aggregates in gelled yolk were composed only of LDLP, which suggested that the other yolk components (i.e. lipovitellins, livetins and phosvitin) might not directly participate in yolk gelation. However, the possibility that low density lipoprotein in granule (LDLG) might be partly responsible for gelation can not be excluded, because the lipid and protein composition of LDLG and LDLP were almost the same and LDLG also aggregated during freezing, as well as LDLP.

L20 ANSWER 90 OF 93 DISSABS COPYRIGHT (C) 2007 ProQuest Information and Learning Company; All Rights Reserved on STN
ACCESSION NUMBER: 81:17785 DISSABS Order Number: AAR8113407
TITLE: THE INDUCTION OF MULTIPLE AVIAN VITELLOGENIN SYNTHESIS BY ESTROGEN AND THE BIOSYNTHESIS AND POST-TRANSLATIONAL MODIFICATIONS OF AVIAN VITELLOGENINS IN HEPATOCYTES
AUTHOR: WANG, SHO-YA [PH.D.]
CORPORATE SOURCE: STATE UNIVERSITY OF NEW YORK AT STONY BROOK (0771)
SOURCE: Dissertation Abstracts International, (1981) Vol. 42, No. 1B, p. 189. Order No.: AAR8113407. 257 pages.
DOCUMENT TYPE: Dissertation
FILE SEGMENT: DAI
LANGUAGE: English
ENTRY DATE: Entered STN: 19921118
Last Updated on STN: 19921118
AB The synthesis of vitellogenin has been extensively studied as a model for estrogen action in the avian and amphibian liver. Vitellogenin is an egg yolk precursor protein of hepatic origin. It was previously believed that vitellogenin is a single protein, but my investigation indicated that avian vitellogenin is a group of proteins representing the products of multiple vitellogenin genes.

The precursor-product relationship between avian vitellogenin and egg yolk proteins has been known for years, however, little is known about the structural relationship between vitellogenin and egg yolk proteins. Limited proteolysis mapping indicated that vitellogenin II gives rise to polypeptides of both alpha- and beta-lipovitellin, and vitellogenin I gives rise to only polypeptides of alpha-lipovitellin. The analysis of individual lipovitellin polypeptides by limited proteolysis mapping allows us to assign most of them a specific vitellogenin precursor. Finally, antibodies raised against alpha- or beta-lipovitellin reacted with vitellogenin in a way consistent with the results from the limited proteolysis mapping.

While the hormonal regulation of vitellogenin synthesis has received considerable attention, little is known about the post-translational modifications of these phosphoglycoproteins. We studied

the phosporylation and glycosylation of vitellogenins in hepatocyte suspension. A group of nonphosphorylated vitellogenins with higher mobility than plasma vitellogenins were found in the liver cells from laying hens and DES-induced roosters. Only a trace amount of phosphorylated vitellogenins was present in the liver cell. The secreted vitellogenins, however, were phosphorylated and comigrated with plasma vitellogenins.

We have shown that the nonphosphorylated vitellogenins of higher mobility are in fact the precursors of the secreted vitellogenins. First we showed that the difference in mobility is a direct consequence of the difference in phosphorylation. Dephosphorylation of plasma vitellogenin indicated that the mobility of vitellogenins increased after removal of phosphates. Thus the lower and higher mobility vitellogenins found in the liver cell may correspond to the phosphorylated and nonphosphorylated forms of the proteins, respectively. Second, pulse-chase experiments suggested that these nonphosphorylated vitellogenins were the precursors of cellular and secreted phosphorylated vitellogenins. Finally, limited proteolysis mapping analysis showed that pVTG I and pVTG II are structurally close-related to VTG I and VTG II, respectively.

The incorporation of {3}H-glucosamine into pVTG proteins suggests that some glycosylations occur prior to phosphorylation. Tunicamycin was used to block the glycosylation of newly synthesized vitellogenins. The nonglycosylated vitellogenins with higher mobility than the glycosylated vitellogenins can be phosphorylated to the same degree as the glycosylated vitellogenins as judged from the mobility on SDS gel. The nonglycosylated phosphorylated vitellogenins are secreted, but the secretion is partially inhibited by tunicamycin.

Several treatments including treatment of colchicine, reduction of incubation temperature, and omission of amino acid from incubation medium were tried to block the secretion of vitellogenins. They all partially inhibited the secretion of vitellogenins. Colchicine might interfere the conversion of pVTG's into VTG's. Both reduction of temperature and amino acid withdral caused the accumulation of a new phosphoglycoprotein, VTG X, which migrates slightly faster the VTG II. The nature of VTG X is still unknown.

To answer the question to whether estrogen coordinately induces different vitellogenins, the plasma from roosters various times after estrogen administration was analyzed. The data showed that the accumulation of vitellogenin I does not parallel that of vitellogenin II. Furthermore the hepatic synthesis of vitellogenins indicated that vitellogenin I has greater secondary response than vitellogenin II. These data suggested that the synthesis of vitellogenin I and vitellogenin II are not coordinately regulated by estrogen.

L20 ANSWER 91 OF 93 USPATFULL on STN

ACCESSION NUMBER:	81:70653 USPATFULL
TITLE:	Process for the extemporaneous preparation of liposomes
INVENTOR(S):	Marchetti, Enzo, Rome, Italy Bucciarelli, Umberto, Rome, Italy
PATENT ASSIGNEE(S):	Istituto Farmacologico Serono S.p.A., Italy (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4308166		19811229	
APPLICATION INFO.:	US 1979-89386		19791030	(6)

	NUMBER	DATE
PRIORITY INFORMATION:	IT 1978-51947	19781117

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Lovering, Richard D.

LEGAL REPRESENTATIVE: Ostrolenk, Faber, Gerb & Soffen
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
LINE COUNT: 455
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The extemperaneous preparation of liposomes incorporating englobed therapeutically active substances is effected by introducing an aspirated phopholipid emulsion into a container containing the active substance as a dry powder or lyophilate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 92 OF 93 USPATFULL on STN
ACCESSION NUMBER: 79:6943 USPATFULL
TITLE: Plaque dispersing enzymes as oral therapeutic agents by molecular alteration
INVENTOR(S): Simonson, Lloyd G., Waukegan, IL, United States
Lamberts, Burton L., Libertyville, IL, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Secretary of the Navy, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4138476		19790206
APPLICATION INFO.:	US 1977-821275		19770803 (5)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Roberts, Elbert L.
ASSISTANT EXAMINER: Eakin, Molly C.
LEGAL REPRESENTATIVE: Sciascia, Richard S., Montanye, George A.
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 463
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An oral therapeutic substance is formed by modifying a plaque-dispersing enzyme to control and reduce the occurrence of dental caries and periodontal diseases. In one embodiment, the modification is performed by introducing a suitable complexing reagent in combination with carrier and plaque-dispersing glucanohydrolase molecules to molecularly alter the glucanohydrolase. The modification, while having insignificant effects on the catalytic activity of the enzyme, will increase the binding capability of the enzyme to substances of which the tooth surface is formed. The activity of the enzyme on the tooth surface will therefore be maintained for longer periods of time to combat plaque build-up.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 93 OF 93 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1966:5153 CAPLUS
DOCUMENT NUMBER: 64:5153
ORIGINAL REFERENCE NO.: 64:956f-h
TITLE: The phosvitin kinase enzyme of cerebral microsomes
AUTHOR(S): Desci, L.; Rodnight, R.
CORPORATE SOURCE: Univ. London
SOURCE: Journal of Neurochemistry (1965), 12(9-10), 791-6
CODEN: JONRA9; ISSN: 0022-3042
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The phosvitin kinase system and the cation-stimulated ATPase system in cerebral microsomes was examined to distinguish between the 2 systems. Although 0.01mM p-chloromercuribenzoate, mM 2,4,6-trinitrobenzene sulfonate, 0.1mM ouabain, 2mM chlorpromazine, and 0.25 mg./ml. suramin (I)

inhibited ATPase, only I also inhibited the phosvitin kinase system. Assay for activity of the 2 systems in microsomes incubated at 60° showed rapid degradation at the same rate for both systems, with inactivation completed in 2 min. In a microsomal suspension brought to pH 10.5, then immediately to pH 7.4 at 2°, centrifugation, dialysis, and retreatment showed that the 1st treatment solubilized 70% of the phosvitin kinase and 6% of the cation-stimulated ATPase while the resp. figures for the 2nd treatment were 7% and 4%. Phosvitin (2 mg./ml.) inhibited ATPase activity independently of Mg++ concentration, showing that this was not due to binding of the divalent cation by the phosphoprotein. Thus, the phosvitin kinase enzyme is unlikely to form part of the ATPase system.

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☐	L4	L2 and conjugat$	13
☐	L3	L2 and (cream | cosmetic | lotion |emulsion |suspension | coat$ | ointment)	33
☐	L2	(phosvitin or yolk stor$ near protein? or vitellogenin) same (composition |formulation |preparation | cream | cosmetic | lotion |emulsion |suspension)	40
☐	L1	(phosvitin or yolk stor$ near protein? or vitellogenin) with (composition |formulation |preparation | cream | cosmetic | lotion |emulsion |suspension)	16

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DATE: Thursday, May 10, 2007

Hide?	Set Name	Query	Hit Count
		DB=PGPB,USPT,USOC; THES=ASSIGNEE; PLUR=YES; OP=ADJ	
☐	L3	L2 and (cream | cosmetic | lotion |emulsion |suspension | coat$ | ointment)	33
☐	L2	(phosvitin or yolk stor$ near protein? or vitellogenin) same (composition |formulation |preparation | cream | cosmetic | lotion |emulsion |suspension)	40
☐	L1	(phosvitin or yolk stor$ near protein? or vitellogenin) with (composition |formulation |preparation | cream | cosmetic | lotion |emulsion |suspension)	16

END OF SEARCH HISTORY